



What are TMDLs?

Water Protection Program fact sheet

11/2005

A Total Maximum Daily Load (TMDL) is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its quality is affected. The TMDL process is simply another tool we can use to fight water pollution. Its main objective is to restore and protect water quality in our streams, rivers and lakes. If a water body is determined to be impaired, a watershed management plan will be developed that will include the TMDL calculation. Missouri has established acceptable standards for drinking water, fishing, swimming, aquatic life and other designated uses. Waters that don't meet these standards are placed on a special list called the 303(d) list.

A stream is considered impaired when it fails to meet Water Quality Standards established by the Clean Water Commission. Section 303(d) of the federal Clean Water Act requires states to identify and list all impaired waters. The list is revised and updated every two years. After studying the scientific data, waters are added or subtracted from the list depending on the status of their health. The department is currently required to develop TMDLs for 171 impaired water bodies for approval by the U.S. Environmental Protection Agency (EPA). Eighty-five have been completed and approved since 1999. Completed TMDLs and other information on water quality issues can be found on the department's Web site at www.dnr.mo.gov/env/wpp.

The Clean Water Commission determines the water bodies to be included on the 303(d) list and submitted to the EPA for their approval. Each river, stream or lake on the list will have a TMDL study done and a plan written for restoring the water to its designated use. Different standards must be met for different uses. For example, water quality requirements for drinking water would be different from those for livestock watering. You can learn more about the condition of your watershed by visiting the EPA on the Web at www.epa.gov/surf.

Information contained in a TMDL document includes:

- Location of the impaired water body
- Identification of the pollutant(s)
- Sources of the pollutant(s)
- A calculation of the pollutant "load" that the water can absorb without becoming impaired
- A plan to reduce the pollutant "load" and restore the water body to meet the standards for its designated use

TMDLs may also be used to address nonpoint sources of pollution that occur when runoff from rainwater, snowmelt and crop irrigation carries pollutants into the water. Polluted runoff isn't as easy to spot as a pipe from a factory or a sewage treatment plant. However, garden fertilizers, automotive oil, construction debris and even pet and yard wastes pose serious and significant threats to our environment.



The TMDL process works best when local people get together to understand and identify problems in their watershed. That way they can help develop the most effective solution for reducing water pollution. Citizen participation and cooperation is crucial for successful watershed management. Inclusive, community-based, public stewardship is the key to protecting our natural resources.

For more information

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